

## INTERNATIONAL SEARCH REPORT

International application No.  
PCT/US94/13270**A. CLASSIFICATION OF SUBJECT MATTER**

IPC(6) :C12N 5/00, 15/00  
 US CL :424/7.1; 435/172.3, 240.2; 800/2

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 424/7.1; 435/172.3, 240.2; 800/2

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

Please See Extra Sheet.

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	ANNUAL REVIEW OF NEUROLOGY, Volume 15, issued 1992, A. Zimmer, "Manipulating the genome by homologous recombination in embryonic stem cells", pages 115-137, see entire article.	1-43
Y	CHROMOSOMA, Volume 100, Number 5, issued 1991, M.S. Szollosi et al., "Chromatin behavior under influence of puromycin and 6-DMAP at different stages of mouse oocyte maturation", Abstract only, see entire Abstract.	1-43

Further documents are listed in the continuation of Box C.  See patent family annex.

Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A"	document defining the general state of the art which is not considered to be of particular relevance	
"E"	earlier document published on or after the international filing date	"X"
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reasons (as specified)	"Y"
"O"	document referring to an oral disclosure, use, exhibition or other means	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"P"	document published prior to the international filing date but later than the priority date claimed	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
	"&"	document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
23 MARCH 1995	06 APR 1995

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## INTERNATIONAL SEARCH REPORT

National application No.

PCT/US94/13270

## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	DEVELOPMENTAL BIOLOGY, Volume 152, Number 1, issued 1992, D. Wiskramasinghe et al., "Centrosome phosphorylation and the developmental expression of meiotic competence in mouse oocytes", Abstract only, see entire Abstract.	1-43
Y	JOURNAL OF ASSISTED REPRODUCTION AND GENETICS, Volume 9, Number 4, issued 1992, P. DeSutter et al., "Parthenogenetic activation of human oocytes by puromycin", Abstract only, see entire Abstract.	1-43
Y	GAMETE RESEARCH, Volume 22, issued 1989, C.B. Ware et al., "Age dependence of bovine oocyte activation", pages 265-275, see entire article.	1-43
X	JOURNAL OF REPRODUCTION AND FERTILITY, Volume 98, Number 2, issued July 1993, Y. Tsunoda et al., "Nuclear transplantation of embryonic stem cells in mice", pages 537-540, see entire article.	1, 5-8, 23, 25-28 -----
Y	THERIOGENOLOGY, Volume 38, Number 2, issued August 1992, X. Yang et al., "Micromanipulation of mammalian embryos: Principles, progress and future possibilities", pages 315-335, see entire article.	2-4, 9-22, 24, and 29-43
X	ROUX'S ARCHIVE OF DEVELOPMENTAL BIOLOGY, Volume 201, issued 1992, S. Saito et al., "Bovine embryonic stem cell-like cell lines cultured over several passages", pages 134-141, see entire article.	1-43
Y	US, A, 5,096,822 (ROSENKRANS, JR. ET AL.) 17 MARCH 1992, see entire document.	1-43

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## B. FIELDS SEARCHED

Electronic data bases consulted (Name of data base and where practicable terms used):

Databases: APS, ANABSTR, AQUASCI, BIOPHYSICS, BIOSIS, BIOTECHABS, BIOTECHDS, CA, CABA, CAPREVIEWS, CEABA, CEN, CIN, CHACS, CJELSEVIER, CONFSCI, DISSABS, DRUGNL, EMBASE, FSTA, GENBANK, HEALSAFE, IFIPAT, JICST-E, JPNEWS, LIFESCI, MEDLINE, NTIS, OCEAN, PHIC, PHIN

Search terms: embryo?; stem; cell#; oocyte#; activat?; cold; cultur?; cation; calcium; magnesium; strontium; phosphor?; ionophor?; staupurine; aminopurine; criaa; stice?/au; streichenko?/au; scott?/au; jugella?/au; fus?; nuclear? transfer?; transplant?; dissaggre?; pig#; porcine; horse#; equin?; cow#; bovin?; antelop?; goat#; sheep; ovin?; ungulat?; electro?; sperm; oocyt?; calcium; ethanol; alcohol; kinase; inhibi?; serine; threonin?; phosphatase; pronas?; enucleat?; chimer?; transgen?; mouse; mice; murine